

Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1- 9. (Cancelled)

10. (Currently Amended) The device of claim 15, further comprising a hand support at the housing opening, ~~said~~ the hand support being adjustable to vary the size of the opening.

11. (Currently Amended) The device of claim 10, wherein ~~said~~ the hand support receives the palm of a human hand and the top of ~~said~~ the opening is curved to generally fit the profile of [[a]] the human hand across the top of the hand.

12 - 14. (cancelled)

15. (Currently Amended) A measuring device for non-invasively measuring levels of constituents in blood and tissue in a subject, ~~said~~ the measuring device comprising:

- (a) a housing having an opening for receiving a hand of the subject;
- (b) a polychromatic light source that emits a broad spectrum of light in the near infrared range and adjacent visible light;

- (c) a part receptor shaped for receiving a finger of ~~said~~ the subject, ~~said~~ the part receptor being located relative to ~~said~~ the light source so that when ~~said~~ the finger of ~~said~~ the subject is placed in the part receptor, ~~said~~ the light source can be activated and light from ~~said~~ the light source can be directed onto ~~said~~ the finger, ~~said~~ the part receptor ~~[[is]]~~ being shaped to receive ~~said~~ the part finger in close alignment, so as to reduce extraneous light;
- (d) a light receptor for collecting a continuum of wavelengths over ~~said~~ the broad spectrum of light after ~~said~~ the broad spectrum of light has been directed onto ~~said~~ the finger;
- (e) a dispersion element coupled to ~~said~~ the light receptor for dispersing light collected by ~~said~~ the light receptor into a dispersed spectrum of component wavelengths;
- (f) a photodetector coupled to ~~said~~ the dispersion element for taking absorbance measurements from ~~said~~ the dispersed spectrum and producing a measurement signal;
- (g) a communications interface connectable to an external computer for communicating ~~said~~ the measurement signal to ~~said~~ the external computer, and
- (h) a power interface connectable to an external stabilized power source.

16. (Currently Amended) The device of claim 15, wherein ~~said~~ the polychromatic light source is connected to ~~said~~ the power interface.

17. (Currently Amended) The device of claim 15, further comprising ~~said~~ the external computer, wherein ~~said~~ the external computer controls at least one function of ~~said~~ the compact measuring device, ~~said~~ the computer including means for receiving ~~said~~ the measurement signal.

18. (Currently Amended) The device of claim 17, further comprising an analog to digital converter for converting ~~said~~ the measurement signal into a digital measurement signal for communication to ~~said~~ the computer.

19. (Currently Amended) The device of claim 17, wherein, ~~said~~ the external computer includes a memory element, a storage element, and a software element for storing a plurality of ~~said~~ measurement signals for a plurality of measurements.

20. (Currently Amended) The device of claim 17, wherein, ~~said~~ the external computer includes a memory element, a storage element, and a software element for storing, retrieving and displaying dosage information corresponding to measurement signals received by ~~said~~ the computer from ~~said~~ the device.

21. (Currently Amended) The device of claim 17, further comprising ~~said~~ the external stabilized power source.

22. (Currently Amended) The device of claim 21, wherein ~~said~~ the external stabilized power source is provided by ~~said~~ the external computer.

23. (Currently Amended) The device of claim 15, further comprising ~~said~~ the external stabilized power source.

24. (Currently Amended) The device of claim 15, wherein ~~said~~ the subject is a human or an animal.